

AMENDMENTS TO THE CLAIMS

1-15. (canceled)

16. (currently amended): A method for identifying an inhibitor of Non-A β Component of amyloid Precursor (NACP)/ α -synuclein aggregation comprising:

providing a test compound, a first sample and a second sample, wherein each sample comprises NACP/ α -synuclein derived from the same source;

inducing NACP/ α -synuclein aggregation in the first sample and second sample by subjecting them to an iron-catalyzed oxidative condition, wherein the condition is achieved by adding an amount of exogenous ferric ion or exogenous ferrous ion and hydrogen peroxide effective to aggregate NACP/ α -synuclein;

exposing the first sample to the test compound;

measuring an aggregation level of NACP/ α -synuclein in the first sample and the second sample; and

comparing the aggregation level of NACP/ α -synuclein in the first sample and with the aggregation level of the second sample, wherein less aggregation in the first sample is indicative that the test compound is an inhibitor of NACP/ α -synuclein aggregation.

17. (previously presented): The method of claim 16, wherein the test compound comprises β -synuclein.

18-20. (canceled)

21. (previously presented): The method of claim 16, wherein the first sample comprises cells that express NACP/ α -synuclein.

22. (previously presented): The method of claim 21, wherein the cells are neuronal cells.

23. (previously presented): The method of claim 22, wherein the neuronal cells comprise cells of the substantia nigra region of the brain.

24. (previously presented): The method of claim 16, wherein the iron-catalyzed oxidative condition comprises ferric iron.

25. (previously presented): The method of claim 16, wherein the iron-catalyzed oxidative condition comprises ferrous iron and hydrogen peroxide.

26-27. (canceled)

28. (previously presented): The method of claim 16, wherein the NACP/ α -synuclein comprises a human recombinant NACP/ α -synuclein.

29-39. (canceled)